4CPS-233 THERAPEUTIC SWITCH OF ANTIRETROVIRAL TREATMENTS: EFFICACY, TOLERABILITY AND REASON FOR CHANGE

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Background and importance The introduction of bitherapy has been a great advance in antiretroviral treatment. This has made it possible to obtain the same results in terms of efficacy with a smaller number of active ingredients (API), simplification of dosage, reduction of adverse effects (AE) and decrease in interactions.

Aim and objectives Describe the patient's profile, description of current bitherapy and previous treatment

The second objective was to study the efficacy, safety and interactions of bitherapy, as well as the reason for switching.

Material and methods A retrospective descriptive study conducted in a tertiary hospital. Patients treated with dolutegravir +lamivudine/dolutegravir+rilpivirine bitherapy during the period 2016–2021 were included.

Variables were collected through the electronic medical record: demographics (sex, age), comorbidities, viral load (CV) and CD4 prior to change of therapy and 12 months post-switch, previous treatment and reason for change.

Results A total of 104 patients on treatment with 105 bitherapies based on dolutegravir/lamivudine (68/105) and dolutegravir/rilpivirine (37/105) were included. 70.2% were men with a median age of 51 (24–84) years.

The main pretreatment for dolutegravir/lamivudine was dolutegravir/lamivudine/abacavir (79.4%), while for dolutegravir/rilpivirine it was dolutegravir/rilpivirine/tenofovir-alafenamide (78.4%).

In 85.7% of patients it involved a reduction in the number of APIs (pre: 3 vs post: 2) and in 14.3% a simplification of the regimen to a single tablet/day.

Prior to the switch, 97.1% of patients had undetectable CV (<50 copies/mL) and CD4 levels of 750 (300–2720) cells/µL. After 1 year post-switch, 95.2% were CV-negative with CD4 levels 800 (354–1580) cells/µL. One episode of nervousness was collected as an AE. No interactions were detected.

The main reason for therapeutic switch was simplification (62.9%) followed by comorbidities, mainly cardiovascular (31.4%), AE (2.9%), interactions (1.9%) and loss of efficacy (0.9%).

Conclusion and relevance Treatment with dolutegravir-based bitherapies has proven to be an effective, safe therapy with no relevant interactions.

The principal reason for switching to bitherapy is simplification, achieving a reduction in both the number of tablets and the number of APIs versus previous therapies.

The role of the pharmacist was fundamental for pharmaceutical care and clinical follow-up, detection of interactions, as well as the monitoring of adverse effects.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-234 IMPACT OF AN INTENSIVE MONITORING PROGRAMME ON METHOTREXATE ELIMINATION

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Background and importance High-dose methotrexate (hDMTX) can cause significant toxicities, especially renal ones. Adequate patient management is essential to prevent them and reduce hospital stay.

Aim and objectives To determine if the implementation of an **intensive monitoring programme** (IMP) of MTX concentrations ([MTX]) and supporting measures improved the **methotrexate clearance** in comparison with a standard monitoring programme (SMP) in patients with haematological malignancies.

Material and methods Retrospective observational study was performed including patients admitted to a haematology ward between January 2020 and September 2021, all treated at hDMTX (≥500 mg/m^2).

SMP consisted of (A) daily pH monitoring and (B) pharmacokinetic monitoring 48 hours after starting infusion and every 24 hours until [MTX]<0.2 µM.

IMP consisted of (A) 6-hourly pH monitoring and (B) pharmacokinetic monitoring at 12, 23, 36 and 42 hours after starting infusion. Then, individualised monitoring based on a Bayesian estimation of MTX clearance and volume of distribution until [MTX]<0.2 µM.

Demographic and treatment variables were collected from hospital health electronic records. Participants were divided into two groups: IMP and SMP. The principal variable was defined as time (days) to [MTX]<0.2 µM from start of infusion.

Statistical analysis was conducted with STATA version 17.1. Mann–Whitney test was performed to compare medians of the principal variable. Other variables were analysed with descriptive statistics.

Results Demographic and treatment variables are summarised below:

Variable±SD	SMP	IMP
Sex (count)	12 female,7 male	8 female,14 male
Age (years)	50.89±13.28	63.45±6.79
Body surface area (m^2)	1.67±0.16	1.72±0.13
Diagnosis* (count)	7 ALLB, 9 NHL, 3 ALLT	2 ALLB, 16 NHL, 4 PCL
Total dose (mg)	3130.7±2063	2043.4±2247.3
Basal serum creatinine (mg/dL)	1.01±0.78	0.77±0.19
Final serum creatinine (mg/dL)	0.8±0.35	0.78±0.24

*B-cell acute lymphoblastic leukemia (ALLB), T-cell acute lymphoblastic leukemia (ALLT), non-Hodgkin lymphoma (NHL), primary cerebral lymphoma (PCL).

41 treatment courses with MTX were included (19 SMP/22 IMP). Median time to [MTX]<0.2 µM in SMP group was 3 (range 2–12) days and for IMP group was 3 (range 2–4) days (p=0.2382). 4 patients in the SMP group needed 5–12 days to obtain [MTX]<0.2 µM.